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BASF CORPORATION
Patent Department
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EXAMINER

ABRAHAM, AMJAD A

ART UNIT	PAPER NUMBER
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4151

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/595,060	Applicant(s) HINTZE-BRUENING ET AL.	
	Examiner AMJAD ABRAHAM	Art Unit 4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/25/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

- a. **Applicant uses reference characters throughout their disclosure and it would be beneficial to the understanding of the application if drawings were submitted to supplement the disclosure and coincide with the reference characters.**

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: **Applicant has not specifically described the composition of the protective sheet (S) claimed in claims 1-22. Applicant is encouraged to supply the generic name and ingredients for said protective sheet.**

- a. The only working examples of the protective sheet provided by the applicant are shown by trade names or trademarks. Page 20 (lines 2-3) of

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applicant's specification disclose that the protective sheet used in the working example is GH-X 527 from Bischof + Klein, Lengerich. However, this disclosure is insufficient as the use of a trade name or trademark only identifies the source of the product and not its formula or characteristics. The relationship between a trademark and the product it identifies is sometimes indefinite, uncertain, and arbitrary. The formula or characteristics of the product may change from time to time and yet it may continue to be sold under the same trademark. In patent specifications, every element or ingredient of the product should be set forth in positive, exact, intelligible language, so that there will be no uncertainty as to what is meant. Arbitrary trademarks which are liable to mean different things at the pleasure of manufacturers do not constitute such language. *Ex Parte Kattwinkle*, 12 USPQ 11 (Bd. App. 1931).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-7, 12-13, 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Koniger et al. (WIPO International Publication WO 00/63015, made of

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record by the applicant, whose English equivalent is Koniger et al. (USP No. 6,777,089 B1)—Applicant has admitted that WO 00/63015 is applicant's admitted prior art and thus well known in the art [therefore steps 1-5 are clearly anticipated by applicant's admission and WO 00/63015])

4. In claim 1, Koniger teaches a process for producing polymer moldings (M/T/B) with functional surfaces (O) for which (I) a coating (B) is produced on a thermoplastic support sheet (T) by a process comprising (I.1) coating one surface (T.1) of (T) with at least one pigmented coating material (B.1) **(See column 4 line 45 to column 5 line 45, disclosing the addition of a coloring layer (pigment) to the substrate (support sheet.)** and (I.2) coating the resulting film (B.1) with at least one chemically curable coating material (B.2) **(See column 4 line 45 to column 5 line 45, disclosing the addition of an outer layer which is radiation curable. Also see column 1, lines 50-67 disclosing the addition of an outer layer that is radiation curable.)** to give the film (B.2) following its curing a transparent coating (B.2) **(See Column 5 lines 32-35, disclosing that the outer layer is transparent.)**, (II) inserting the resulting coated thermoplastic support sheet (I/B) into an open mold, (III) closing the mold and contacting the uncoated side (T.2) of the coated thermoplastic support sheet (I/B) with a liquid polymeric material (M) to shape the coated thermoplastic support sheet (T/B) and join it firmly to the polymeric material (M), and causing the polymeric material (M) to solidify **(See claim 11 and column 6 lines 61-67, disclosing the injection-back molding of a polymer composition to the substrate sheet.)**, and (IV) removing from the mold **(Inherently the sheet is removed from the mold after the addition of the**

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polymer back molding.), the resulting coated polymer molding (M/T/B), whose coating (B) is uncured, part-cured or full-cured; where (V) fully curing in or after at least one of step (I) step (III) or step (IV) the uncured or part-cured coating (B) or after step (IV) the full-cured coating (B) is aftercured; the coating (B) being covered at least temporarily with a protective sheet (S) **(See column 5, lines 33-38, disclosing covering the sheet with a protective layer. This protective sheet allows the curing process to be delayed.)**, wherein the protective sheet (S) has (s.1) a storage modulus E' of at least 10^7 Pa in the temperature range from room temperature to 100.degree. C., (s.2) an elongation at break >300% at 23.degree. C. longitudinally and transversely to the preferential direction produced by means of directed production processes in the production of (S), (s.3) a transmittance >70% for UV radiation and visible light with a wavelength of from 230 to 600 nm for a film thickness of 50 micrometers and wherein the coating (B)-facing side (S.1) of the protective sheet (S) has (s.1.1) a hardness <0.06 GPa at 23.degree. C. and (s.1.2) a roughness corresponding to an R^a from 50 micrometers² <30 nm as determined by means of atomic force microscopy (AFM).

(Applicant states that the claimed protective sheet can be selected from the group of films consisting of polyethylene, polypropylene, ethylene copolymer, propylene copolymers, and ethylene-propylene copolymers (See applicant's specification—page 16, lines 10-14). Furthermore, applicant has stated that “the protective sheets for inventive use are conventional.” (See page 17, line 9). Essentially, applicant has disclosed the use of a well known conventional plastic as a protective sheet. Therefore if the composition of the protective sheet is

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physically the same in the prior art and applicant's disclosure, it must have the same properties. In this case, the applicant has disclosed that polyethylene can be used as the protective sheet and that the polyethylene protective sheet can have the key properties claimed in claim 1. On the other hand, applicant has cited WO 00/63015 A1 as admitted prior art and that art also discloses the use of a polyethylene protective sheet. (See column 5, lines 35-39 in 6,777,089 which is the English equivalent of WO/63015.) Both the admitted prior art and applicant's disclosure admit a composition (the protective sheet) that uses polyethylene. In sum, since the protective sheet claimed in claim 1 and the protective sheet claimed in the admitted prior art both have similar chemical compositions they must have similar properties. Thus, the properties claimed in claim 1 must be inherent.)

b. Where the claimed and prior art products are identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Additionally, "products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Also see MPEP 2112.01 (I and II).

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- c. Examiner submits Derwent Publication 2007-573919 (Disclosing abstract of DE102005053661 A1 by Austrup et al.) as evidence of inherency. Austrup discloses a plastic foil with the following characteristics: (1) an elongation rupture (elongation break) of 300-1500%; (2) a transmittance of greater than 70% at a wavelength of 230-600 nm; (3) a hardness of .005-.06 GPa at 23 C; and (4) a roughness of 5-30nm according to an Ra value of 50 μm^2 . Austrup discloses a plastic foil that contains at least homo- and copolymers such as polyethylene, propylene, and ethylene copolymer. Homo-polymers and Copolymers such as polyethylene inherently have the physical characteristics claimed by applicant in claim 1. There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure *at the time of invention*, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003).
5. In claim 2-4, Koniger teaches: (claim 2) wherein the protective sheet (S) has a storage modulus E' of from 10^7 to 10^8 Pa; (claim 3) wherein the protective sheet (S) has an elongation at break of from 400 to 900%; and (claim 4) wherein the coating (B)-facing side (S.1) of the protective sheet (S) (s.1.1) has a hardness <0.02 GPa.
- d. **(Applicant states that the claimed protective sheet can be selected from the group of films consisting of polyethylene, polypropylene, ethylene copolymer, propylene copolymers, and ethylene-propylene copolymers (See applicant's specification—page 16, lines 10-14). Furthermore,**

applicant has stated that “the protective sheets for inventive use are conventional.” (See page 17, line 9). Essentially, applicant has disclosed the use of a well known conventional plastic as a protective sheet. Therefore if the composition of the protective sheet is physically the same in the prior art and applicant’s disclosure, it must have the same properties. In this case, the applicant has disclosed that polyethylene can be used as the protective sheet and that the polyethylene protective sheet can have the key properties claimed in claim 1. On the other hand, applicant has cited WO 00/63015 A1 as admitted prior art and that art also discloses the use of a polyethylene protective sheet. (See column 5, lines 35-39 in 6,777,089 which is the English equivalent of WO/63015.) Both the admitted prior art and applicant's disclosure admit a composition (the protective sheet) that uses polyethylene. In sum, since the protective sheet claimed in claim 1 and the protective sheet claimed in the admitted prior art both have similar chemical compositions they must have similar properties. Thus, the properties claimed in claim 1 must be inherent.)

e. Where the claimed and prior art products are identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Additionally, “products of identical chemical composition can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior

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art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Also see MPEP 2112.01 (I and II).

6. In claim 6, Koniger teaches wherein the protective sheet (S) is selected from the group consisting of films made of polyethylene, polypropylene, ethylene copolymers, propylene copolymers, and ethylene-propylene copolymers. **(See column 5, lines 36-39, disclosing that the protective layer can be polyethylene or PET.)**

7. In claim 7, Koniger teaches wherein the side of the protective sheet has adhesive properties. **(See column 5, lines 32-38—disclosing that the protective sheet is a removable film. This removable film is applied to the protective layer and must inherently have some adhesive quality. Inherently, the protective layer must have adhesive properties in order to stick and later be removed from the outer layer.)**

8. In claim 12, Koniger teaches wherein the thickness of the protective sheet (S) is from 10 to 100 μm . **(See column 5, lines 34-37—disclosing that the protective sheet is between 50 and 100 μm .)**

9. In claim 13, Koniger teaches wherein the protective sheet (S) is applied to the coating (B) after step (I). **(See column 5, lines 33-37-- disclosing that the protective sheet is applied to the outer layer which comprises of the coating.)**

10. In claim 17, Koniger teaches wherein the thermoplastic support sheet (T) has a film thickness ≥ 0.5 mm. **(See column 4, lines 64-65—disclosing that the substrate layer thickness is between 50 μm to 5mm.)**

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11. In claim 18, Koniger teaches wherein the coated thermoplastic support sheets (I/B) or the cut-to-size pieces thereof are preformed prior to step (II). **(See column 7, lines 4-7 and lines 59-63—disclosing that there is a thermoforming process prior to molding of back layer.)**

12. In claim 19, Koniger teaches wherein the coated thermoplastic support sheets (T/B) or the cut-to-size pieces thereof are adapted to the contours of the molds. **(See claim 11, disclosing that the resultant film made in step 1 is molded in a thermoforming operation. Inherently, the sheets will adapt to the contours of the mold.)**

13. In claim 20, Koniger teaches wherein the functionality of the surface (O) of the polymer moldings (M/T/B) is one which imparts at least one of color, effect electroconductivity, magnetic shielding, inhibition of corrosion, fluorescence or phosphorescence. **(See column 5, lines 1-31, disclosing that the resultant product imparts color onto the molding as the outer layer is transparent and the coloring interlayer shows through the product.)**

14. In claim 21 Koniger teaches at least one of means of transport, constructions, windows, doors, furniture, and utility articles comprising the polymer moldings produced by the process of claim 1. **(See column 7, lines 20-33, disclosing that the films can be used for many applications such as doors.)**

15. In claim 22 Koniger teaches a protective sheet for production of polymer molding comprising a sheet having (s.1) a storage modulus E' of at least 10^7 Pa in the temperature range from room temperature to 100.degree. C., (s.2) an elongation at

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break >300% at 23.degree. C. longitudinally and transversely to the preferential direction produced by means of directed production processes in the production of (S), (s.3) a transmittance >70% for UV radiation and visible light with a wavelength of from 230 to 600 nm for a path length of 50 micrometers where at least one surface of the sheet has (s.1.1) a hardness <0.06 GPa at 23.degree. C. and (s.1.2) a roughness corresponding to an R^a from 50 micrometers² < 30 nm as determined by means of atomic force microscopy (AFM).

f. (Applicant states that the claimed protective sheet can be selected from the group of films consisting of polyethylene, polypropylene, ethylene copolymer, propylene copolymers, and ethylene-propylene copolymers (See applicant's specification—page 16, lines 10-14). Furthermore, applicant has stated that "the protective sheets for inventive use are conventional." (See page 17, line 9). Essentially, applicant has disclosed the use of a well known conventional plastic as a protective sheet. Therefore if the composition of the protective sheet is physically the same in the prior art and applicant's disclosure, it must have the same properties. In this case, the applicant has disclosed that polyethylene can be used as the protective sheet and that the polyethylene protective sheet can have the key properties claimed in claim 1. On the other hand, applicant has cited WO 00/63015 A1 as admitted prior art and that art also discloses the use of a polyethylene protective sheet. (See column 5, lines 35-39 in 6,777,089 which is the English equivalent of WO/63015.) Both the

admitted prior art and applicant's disclosure admit a composition (the protective sheet) that uses polyethylene. In sum, since the protective sheet claimed in claim 1 and the protective sheet claimed in the admitted prior art both have similar chemical compositions they must have similar properties. Thus, the properties claimed in claim 1 must be inherent.)

g. Where the claimed and prior art products are identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Additionally, "products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Also see MPEP 2112.01 (I and II).

h. Examiner submits Derwent Publication 2007-573919 (Disclosing abstract of DE102005053661 A1 by Austrup et al.) as evidence of inherency. Austrup discloses a plastic foil with the following characteristics: (1) an elongation rupture (elongation break) of 300-1500%; (2) a transmittance of greater than 70% at a wavelength of 230-600 nm; (3) a hardness of .005-.06 GPa at 23 C; and (4) a roughness of 5-30nm according to an Ra value of 50 μm^2 . Austrup discloses a plastic foil that contains at least homo- and copolymers such as polyethylene, propylene, and ethylene copolymer. Homo-polymers and Copolymers such as

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polyethylene inherently have the physical characteristics claimed by applicant in claim 1. There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure *at the time of invention*, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. Claims 5, 8, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koniger et al. (WIPO International Publication WO 00/63015, made of record by the applicant, whose English equivalent is Koniger et al. (USP No. 6,777,089 B1)—Applicant has admitted that WO 00/63015 is applicant's admitted prior art and thus well

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known in the art [therefore steps 1-5 are clearly anticipated by applicant's admission and WO 00/63015])

19. In claim 5, Koniger remains applied to claim 1 above, Koniger teaches wherein the removal of the protective sheet (S) from the coating (B) requires an averaged force <250 mN/cm. **(See column 5, lines 35-38-- disclosing the fact that the protective layer (sheet) may be removed prior to curing.)**

i. Here, it would have been obvious to one having ordinary skill in the art at the time of invention to adjust the force required to remove the protective sheet for the intended application, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617F.2d 272, 205 USPQ 215 (CCPA 1980).

20. In claim 8, Koniger teaches wherein the side of the protective sheet (S) that faces away from the coating has antiblocking properties. **(Column 6, lines 33-37—discloses that the outer layer is blocking resistant (i.e. does not adhere).)**

j. This is done so the sheet can be rolled up and stored. In Koniger, the protective sheet provides the same function as the outer layer as the sheet is not adhesive. It would have been obvious to one having the ordinary skill in the art to alter the teachings of Koniger by making the protective sheet's outer layer antiblocking so that the sheets can be stacked or rolled up. Essentially the protective sheet or the antiblocking outer layer are interchangeable because they serve the same function.

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21. In claims 14-16, Koniger teaches: (claim 14) wherein the protective sheet (S) is removed from the coating (B) of the coated, thermoplastic, protective-sheet (S)-covered support sheet (T/B/S) immediately before step (II); (claim 15), wherein the protective sheet (S) is removed from the coating (B) of the protective sheet (S)-covered polymer molding (M/T/B/S) after step (IV); and (claim 16) wherein the protective sheet (S) is removed from the coating (B) at least one of before or after the coating (B) has been fully cured or before or after the ding (M/T/B) has been after treated. **(See column 5, lines 33-37-- disclosing that the protective sheet is applied to the outer layer which comprises of the coating. Also the purpose of the protective layer is to prevent unintended curing.)**

k. Essentially, Koniger discloses that the use of the protective sheet is to protect the outer layer from unintended curing. It is well-known in many arts that when unintended curing presents a problem, for example, to polymer moldings, a protective layer should be added to said polymer molding in order to delay curing. This inference of obviousness would have been drawn from creative steps that a person of ordinary skill in that art would normally employ to optimize a polymer molding process. Time delays between the steps delineated in claim 1 would have prompted one having the ordinary skill in the art to gather the best time to remove the protective sheet from the polymer molding. It would have been obvious to use the known step of removing the protective film to control the extent of curing on the polymer moldings.

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22. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koniger et al. (USP No. 6,777,089 B1 which is the English equivalent of WO 00/63015 made of record by the applicant—Applicant has admitted that WO 00/63015 is admitted prior art and thus well known in the art [therefore steps 1-5 are clearly anticipated by applicant's admission and WO 00/63015]) in view of Otaki et al. (USP No. 6,509,076).

23. In claim 9, Koniger does not explicitly teach wherein the protective sheet (S) is constructed from a plurality of layers.

l. However, Otaki discloses wherein the protective sheet (S) is constructed from a plurality of layers. **(See column 10 line 36 to column 11 line 30, disclosing example 1 which discloses that the protective film (part number 6 in figure 1) has multiple layers. More specifically the protective film has an adhesive layer and a release layer (antiblocking layer).)**

m. Koniger and Otaki are analogous art because they solve the similar problem of protecting a laminate sheet from post processing harm by adding a protective sheet to the outer layer. At the time of invention, it would have been obvious to the applicant being one of ordinary skill in the art, having the teachings of Koniger and Otaki before him or her, to modify the teachings of Koniger to include the teachings of Otaki for the benefit of creating a protective layer that is capable of bonding to the outer layer of the laminate sheet any preventing any unwanted curing/damage on the outer surface. **(See Column 1, lines 25-30—disclosing that the multi layer laminate (hologram) has many defects when they are stacked or pressed on top of one another during**

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storage.) The motivation for doing so would have been to delay the defects by adding a protective layer that comes off prior to use. Therefore, it would have been obvious to combine Koniger and Otaki to make a polymer molding whose final product can be delayed until after the protective film was taken off because one would have been motivated to solve the problem of eliminating defects in the resultant product.

24. In claim 10, Koniger does not explicitly teach wherein the protective sheet (S) is constructed from at least one core layer (KNS) made of at least one homopolymer or copolymer and from at least one further layer selected from the group consisting of adhesive layers (KS) and antiblocking layers (AS).

n. However, Otaki discloses wherein the protective sheet (S) is constructed from at least one core layer (KNS) made of at least one homopolymer or copolymer and from at least one further layer selected from the group consisting of adhesive layers (KS) and antiblocking layers (AS). **(See column 10 line 36 to column 11 line 30, disclosing example 1 which discloses that the protective film (part number 6 in figure 1) has multiple layers. More specifically the protective film has an adhesive layer and a release layer (antiblocking layer). Core layers are homopolymers and copolymers.)**

o. Koniger and Otaki are analogous art because they solve the similar problem of protecting a laminate sheet from post processing harm by adding a protective sheet to the outer layer. At the time of invention, it would have been obvious to the applicant being one of ordinary skill in the art, having the

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teachings of Koniger and Otaki before him or her, to modify the teachings of Koniger to include the teachings of Otaki for the benefit of creating a protective layer that is capable of bonding to the outer layer of the laminate sheet any preventing any unwanted curing/damage on the outer surface. **(See Column 1, lines 25-30—disclosing that the multi layer laminate (hologram) has many defects when they are stacked or pressed on top of one another during storage.)** The motivation for doing so would have been to delay the defects by adding a protective layer that comes off prior to use. The adhesive layers and antiblocking layers allow the protective film to be easily taken off from the laminate. Therefore, it would have been obvious to combine Koniger and Otaki to make a polymer molding whose final product can be delayed until after the protective film was taken off because one would have been motivated to solve the problem of eliminating defects in the resultant product.

25. In claim 11, Koniger does not explicitly teach wherein the homopolymers and copolymers of the core layer (KNS) are selected from the group consisting of polyethylene, polypropylene, ethylene copolymers, propylene copolymers, and ethylene-propylene copolymers.

p. However, Otaki discloses wherein the homopolymers and copolymers of the core layer (KNS) are selected from the group consisting of polyethylene, polypropylene, ethylene copolymers, propylene copolymers, and ethylene-propylene copolymers. **(See column 10 line 36 to column 11 line 30, disclosing example 1 which discloses that the protective film (part number**

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6 in figure 1) has multiple layers. Specifically disclosing polyethylene and PET.)

q. Koniger and Otaki are analogous art because they solve the similar problem of protecting a laminate sheet from post processing harm by adding a protective sheet to the outer layer. At the time of invention, it would have been obvious to the applicant being one of ordinary skill in the art, having the teachings of Koniger and Otaki before him or her, to modify the teachings of Koniger to include the teachings of Otaki for the benefit of creating a protective layer that is capable of bonding to the outer layer of the laminate sheet any preventing any unwanted curing/damage on the outer surface.**(See Column 1, lines 25-30—disclosing that the multi layer laminate (hologram) has many defects when they are stacked or pressed on top of one another during storage.)** The motivation for doing so would have been to delay the defects by adding a protective layer that comes off prior to use. Therefore, it would have been obvious to combine Koniger and Otaki to make a polymer molding whose final product can be delayed until after the protective film was taken off because one would have been motivated to solve the problem of eliminating defects in the resultant product.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMJAD ABRAHAM whose telephone number is

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(571)270-7058. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on (571) 272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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AAA

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